

Claims

1. Analysis system comprising a main body with a surface, at least one analysis unit consisting of at least two reservoirs placed in flow connection by at least one passage being provided in the main body, characterised in that two electrical conductors are provided in the main body or on the surface, a first respective end region thereof being connected respectively to one of the at least two reservoirs and a respective second end region of the conductors being connected to or constituting a contact point on the surface of the main body.
2. Analysis system according to claim 1, characterised in that the main body comprises a base plate and a cover plate, the base plate and the cover plate being joined to one another by surfaces.
3. Analysis system according to claim 1 or 2, characterised in that the conductors are connected to the main body by a connection method, being selected from a group of connection methods consisting of bonding, vapour deposition, insertion in recesses and integral moulding.
4. Analysis system according to one of the preceding claims, characterised in that at least a part of the reservoir floor constitutes the conductor.
5. Analysis system according to one of the preceding claims, characterised in that the first end region of the conductor is provided in the form of an electrode which extends between the reservoir floor and an underside of the base plate.

6. Analysis system according to one of the preceding claims, characterised in that the conductor constitutes at least a part of the reservoir wall.

7. Analysis system according to one of the preceding claims, characterised in that the contact points are designed to have a contact surface with a specific internal diameter and the reservoirs an opening with a specific internal diameter and the internal diameter of the contact surface is greater than the internal diameter of the openings of the reservoirs.

8. Analysis system according to one of the preceding claims, characterised in that the contact points are disposed at one common end region of the main body only.

9. Analysis system according to one of the preceding claims, characterised in that the conductors are made from a material selected from a group of materials consisting of metal, electrically conductive plastics, conductive paste and electrically conductive varnish.

10. Analysis system according to one of the preceding claims, characterised in that the main body is designed to a size used as standard for a microtitre plate.

11. Analysis system according to one of the preceding claims, characterised in that several analysis units are provided in a layout used as standard for a microtitre plate.

12. Analysis system according to one of the preceding claims, characterised in that a predeterminable number of analysis units is provided, the number being selected from a group consisting of the figures solving the mathematical formula 3×2^N , where N is a whole number.

13. Analysis system according to one of the preceding claims, characterised in that 96 analysis units are provided.

14. Analysis system according to one of the preceding claims, characterised in that the passage is designed as a micro-passage.

15. Analysis system according to one of the preceding claims, characterised in that the analysis unit is designed to have four reservoirs and two respective reservoirs are connected to a passage and each of the two passages is connected to the other by means of a common intersection region.

16. Analysis system according to one of the preceding claims, characterised in that the four reservoirs are laid out in a pattern used as standard for a microtitre plate.

17. Analysis system according to one of the preceding claims, characterised in that a row width of the four reservoirs is the same as a half value of a row width of the analysis units.

18. Analysis system according to one of the preceding claims, characterised in that the base plate and the cover plate are made from plastics, being selected from a group of plastics consisting of polymethacrylate, polycarbonate, polystyrene, polysulphone and cycloolefin copolymer.

19. Analysis system according to one of the preceding claims, characterised in that the base plate or the cover plate is designed so as to be at least partially opaque.

20. Analysis system according to one of the preceding claims, characterised in that the at least one passage is provided by means of recesses in at least one of the surfaces of the base plate and the cover plate and at least those parts of the surfaces of the base plate and the cover plate immediately surrounding the reservoirs and the passages are joined to one another in a fluid-tight seal by a joining method selected from a group of joining methods consisting of bonding, applying polymerisable bonding agents, adhesion by temporary treatment with a solvent, heat sealing, ultrasonic welding and laser welding.

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